



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/918,300

07/30/2001

Jari Makinen

944-003.043-1

9862

4955

7590

07/28/2004

WARE FRESSOLA VAN DER SLUYS &
ADOLPHSON, LLP
BRADFORD GREEN BUILDING 5
755 MAIN STREET, P O BOX 224
MONROE, CT 06468

EXAMINER

ABEBE, DANIEL DEMELASH

ART UNIT

PAPER NUMBER

2655

10

DATE MAILED: 07/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/918,300

Applicant(s)

MAKINEN ET AL.

Examiner

Daniel D Abebe

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9 and 18 is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 7, 10-12, 14 and 16 is/are rejected.
- 7) ☒ Claim(s) 4, 6, 8, 13, 15 and 17 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Art Unit: 2655

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 5, 7, 10-12, 14 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Bhaskar et al. (6,418,408).

As to claim 1, Bhaskar teaches a method for an improved lost frame recovery technique for concealing frame errors in frames to decoded where each frame comprises a plurality of parameter including spectral parameter, comprising the steps of:

Detecting whether the frame is bad (lost or erased) frame; and

Providing replacement for the LSP parameters of the bad frame by an average of spectral parameter values of two past frame parameters (Col.46, lines 1-10).

According to Bhaskar “In case of a frame erasure, errors in the PW gain parameter are concealed by estimating the PW gain based on the PW gains of the two

Art Unit: 2655

preceding error-free frames and gradually decaying this estimate over the duration of the current frame”.

“In addition to the error concealment techniques for the PW parameters, this invention also proposes error concealment and recovery techniques for the speech line spectral frequency (LSF) parameters and the pitch period parameter. In the case of a frame error, the LSF's are constructed using the previous error-free LSF vector” (Col.5, lines 33-37).

As to claims 2-3 and 5 Bhaskar teaches wherein “a voicing measure, which is quantized and transmitted to the decoder. The voicing measure is estimated for each frame based on certain characteristics of the frame, It is a heuristic measure that assigns a degree of periodicity to each frame. The voicing measure for the current frame, denoted by $v(M)$, occupies the range of values $0 \leq v(M) \leq 1$, with 0 indicating a perfectly voiced or periodic frame and 1 indicating a completely unvoiced or aperiodic frame.” (Col.42, lines 35-41).

As to claim 7, Bhaskar teaches where “The error concealment procedure consists of “bad frame masking” that takes place when we receive a bad frame and “bad frame recovery” that takes place in the first good frame after one or more consecutive bad frames” (Col.39, lines 38-39)

Claims 10-12, 14 and 16 are analogous to claims 1-3 and are rejected by Bhakar for the foregoing reasons.

Allowable Subject Matter

Claims 9 and 18 are allowed.

Art Unit: 2655

The following is a statement of reasons for the indication of allowable subject matter:

The claims are allowable because Bhaskar doesn't teach shifting the ISF towards a partly adaptive mean as recited in the claims.

Claims 4, 6, 8, 13, 15 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

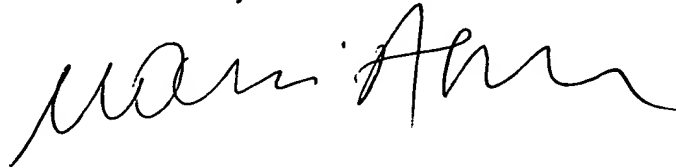
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel D Abebe whose telephone number is 703-308-5543. The examiner can normally be reached on monday-friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 703-305-4827. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2655

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daniel Abebe Primary Examiner A.U. 2655

A handwritten signature in black ink, appearing to read 'Dan Abebe', written in a cursive style.

July 19, 2004